

Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application:

1. (currently amended) Display screen including:
 - light emitters ~~(4, 6, 8)~~ arranged as rows of light emitters and columns of light emitters to form an array of light emitters,
 - a silicon substrate ~~(62)~~ on which control means ~~(2, 10, 20, 30, 40, 42, 44, 46, 48, 50)~~ to control the emissions of the light emitters are fabricated, the said control means including:
 - means ~~(12, 22, 32)~~ for powering the light emitters ~~(4, 6, 8)~~,
 - a plurality of addressing electrodes ~~(40)~~ arranged according to the columns of light emitters, and intended to transmit a voltage (V_D) representing an image datum to each column of light emitters,
 - a plurality of selection electrodes ~~(42, 44, 46)~~ arranged according to the rows of light emitters, and intended to transmit a selection signal (V_{S42}, V_{S44}) to each row of light emitters,
 - a plurality of modulation transistors ~~(14, 24, 34)~~, each associated with a light emitter of the array, the said modulation transistors including a gate electrode intended to be connected to an addressing electrode ~~(40)~~ and two current-carrying electrodes, each modulation transistor intended to have a drain current pass through it to power the said light emitter for a voltage between its gate electrode and one of its current-carrying electrodes that is greater than or equal to a threshold trigger voltage (V_{th}), the said modulation transistors being arranged in columns associated with the columns of light emitters and being aligned on the substrate ~~(62)~~ according to a guiding line ~~(72)~~,

- a load capacitor ~~(16, 26, 36)~~ connected to the terminals of each modulation transistor ~~(14, 24, 34)~~ and intended to set an electric potential at the gate electrode of the associated modulation transistor, and
 - a plurality of compensating transistors ~~(48)~~ intended to compensate for the threshold trigger voltage of the modulation transistors by adjusting the charge on the capacitor,
~~characterized in that~~ wherein a single compensating transistor ~~(48)~~ is connected to all the modulation transistors ~~(14, 24, 34)~~ of a given column and is intended to compensate for the threshold trigger voltages of all the said modulation transistors ~~(14, 24, 34)~~ of this column,
and ~~in that~~ wherein the said compensating transistor ~~(48)~~ is formed in the extension of the line-arrangement of the said modulation transistors ~~(14, 24, 34)~~ of a given column according to the said same guiding line ~~(72)~~.
2. (currently amended) Display screen according to Claim 1, ~~characterized in that~~ wherein the control means do not include any means allowing the flow of current from any one of the addressing electrodes ~~(40)~~ to the means ~~(12, 22, 32)~~ for powering the light emitters.
3. (currently amended) Display screen according to ~~either of Claims 1 and 2,~~ ~~characterized in that~~ Claim 1, wherein the control means include at least one voltage generator connected to one or to each addressing electrode ~~(40)~~ in order to transmit a voltage (V_D) representing an image datum.
4. (currently amended) Display screen according to ~~any one of Claims 1 to 3,~~ ~~characterized in that~~ Claim 1, wherein the compensating transistor ~~(48)~~ of each column of light emitters includes two current-carrying electrodes, each current-carrying electrode being connected in series between the addressing electrode ~~(40)~~ of this same column and the modulation transistors ~~(14, 24, 34)~~ of this same column.

5. (currently amended) Display screen according to ~~any one of Claims 1 to 4,~~
~~characterized in that~~ Claim 1, wherein each compensating transistor (48)
includes a gate electrode and two current-carrying electrodes, the gate
electrode of each compensating transistor (48) being connected to the gate
electrode of all the modulation transistors (14, 24, 34) of the associated
column, in that one current-carrying electrode (51) of each compensating
transistor (48) is connected to the addressing electrode (40) of the associated
column of light emitters, and in that the other current-carrying electrode of
each compensating transistor is connected to its gate electrode.

6. (currently amended) Display screen according to ~~any one of Claims 1 to 5,~~
~~characterized in that~~ Claim 1, wherein the said modulation transistors (14, 24,
34) and the said associated compensating transistor (48) are fabricated on a
polycrystalline silicon substrate obtained by heating an amorphous silicon
substrate (62), using a laser beam (60), the said beam being intended first to
heat a first rectangular heating surface (66) of the substrate, then to move in a
direction of movement (68) and then to heat a second rectangular heating
surface (70),
and in that the said modulation transistors (14, 24, 34) associated with the
light emitters of a given column and the associated compensating transistor
are aligned in one and the same heating surface (66), the guiding alignment
line (72) extending approximately perpendicularly to the direction of
movement (68) of the laser beam (60).

7. (currently amended) Display screen according to ~~any one of the preceding~~
~~claims, characterized in that~~ Claim 1, wherein the said modulation transistors
(14, 24, 34) and the said associated compensating transistor (48) each include
a channel between two layers of doped material, the said channel being
connected to their gate electrode, and in that the channel of the modulation
transistors (14, 24, 34) of a column and the channel of the associated
compensating transistor have a main axis approximately parallel to the said
guiding line (72).

8. (currently amended) Display screen according to ~~any one of the preceding claims, characterized in that~~ Claim 1, wherein the control means (2, 10, 20, 30, 40, 42, 44, 46, 48, 50) include initialization means (50) for initializing the load capacitors (16, 26, 36) intended to discharge all the load capacitors connected to the modulation transistors of a column.
9. (currently amended) Display screen according to Claim 8, ~~characterized in that wherein~~ the initialization means (50) include an initialization transistor (50) having a gate electrode and two current-carrying electrodes, one current-carrying electrode of the said initialization transistor (50) being connected to the gate electrode of the modulation transistors (14, 24, 34) of the said column, the gate electrode of the said initialization transistor (50) being connected to a current-carrying electrode and to the addressing electrode (40) of a column of light emitters.
10. (currently amended) Display screen according to Claim 8, ~~characterized in that wherein~~ the initialization means (50) include a diode, the cathode of which is connected to the gate electrode of the modulation transistors (14, 24, 34) and the anode of which is connected to the addressing electrode (40) of a column of light emitters.
11. (currently amended) Display screen according to ~~any one of the preceding claims, characterized in that~~ Claim 1, wherein the control means (2, 10, 20, 30, 40, 42, 44, 46, 48, 50) include a plurality of selection transistors (18, 28, 38) having a gate electrode and two current-carrying electrodes, each selection transistor having one current-carrying electrode connected to a modulation transistor (14, 24, 34), a gate electrode connected to a selection electrode (42, 44, 46) and one current-carrying electrode connected to the compensating transistor (48) of a column of light emitters.
12. (currently amended) Display screen according to ~~any one of the preceding claims, characterized in that~~ Claim 1, wherein the light emitters (4) are organic electroluminescent diodes.

13. (currently amended) Method for driving a display screen according to ~~any one~~ ~~of Claims 1 to 12, characterized in that~~ Claim 1, wherein the method includes a step for applying a voltage (V_D) representing an image datum to each addressing electrode (40) of each column of light emitters (4, 6, 8).